

SFL/M

AXIAL FAN



Description:

Axial fan for general ventilation systems.

Intended use

SFL/M axial fans are designed for general ventilation systems as air supply or exhaust fans.

The fans are designed to pump clean air in the right direction, depending on the fan version. The devices are adjusted to work inside and outside buildings, both in vertical and horizontal positions.

The fans are designed for operation at a maximum ambient temperature of 55°C. The temperature of the conveyed medium cannot be higher than 55°C and lower than -20°C.

Description

SFL/M fans are manufactured within a diameter range of 315 to 1250 mm and a power range of 0.55 kW to 55 kW. They are always equipped with PTC sensors, and at the Customer's request they can be fitted with IE4 motors. The fan is designed and adjusted for continuous operation under conditions at the place of installation. It is characterised by a high resistance to the mechanical, corrosive, thermal, and humidity impacts to which it will be exposed during operation. The fans can work both in horizontal and vertical positions.

Design

The fan is made of black powder-coated steel sheet with a plastic or aluminium rotor by default. The design of the rotor makes it possible to adjust the angle when the fan is off, with the prior consent of the manufacturer. It is adapted to work with a frequency inverter. Optionally, the fan can be manufactured with galvanised or stainless static elements. Heavy-duty, three-phase 400 V / 50 Hz motors are used in the fans. The motors are made in accordance with the IP55 ingress protection rating, hold F1 insulation class, and use the IC411 cooling method.

Manufacturing versions

SFL/M fans are made in two versions:

- **SFL/M** with a rotor made of glass-reinforced, fibre-reinforced polyamide
- **SFLA/M** with an aluminium rotor

Dimensions

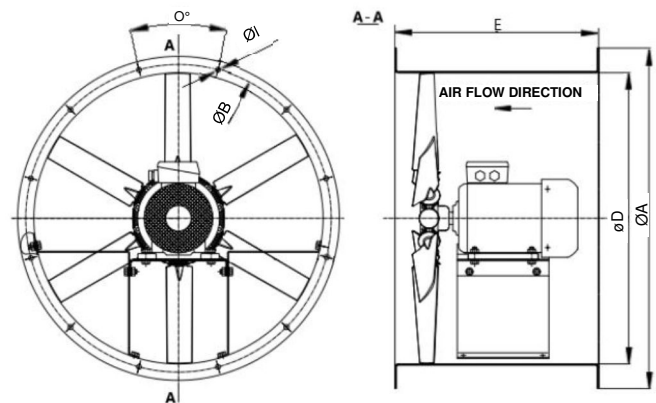
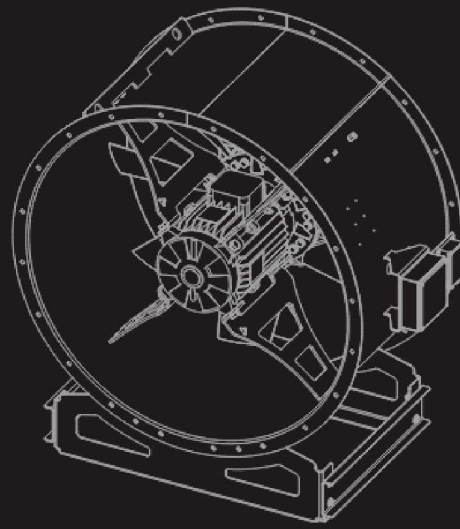


Figure 1. SFL/M fan dimensions

Table 1. Standard dimensions of SFL/M fans

Size	øD [mm]	øA [mm]	øB [mm]	E [mm]	øl [mm]	n x Ø [-]
SFL/M 31	315	375	355	350	10	8x45°
SFL/M 35	355	435	395	395	10	8x45°
SFL/M 40	400	480	450	440	10	8x45°
SFL/M 45	450	530	500	455	12	8x45°
SFL/M 50	500	600	560	540	12	12x30°
SFL/M 56	560	660	620	560	12	12x30°
SFL/M 63	630	730	690	550	12	12x30°
SFL/M 63 B2	630	730	690	770	12	12x30°
SFL/M 71	710	810	770	600	12	16x22.5°
SFL/M 71 B2	710	810	770	770	12	16x22.5°
SFL/M 80	800	900	860	600	12	16x22.5°
SFL/M 90	900	1000	970	820	12	16x22.5°
SFL/M 100	1000	1100	1070	820	12	16x22.5°
SFL/M 112	1120	1220	1190	1000	12	16x22.5°
SFL/M 125	1250	1370	1320	1000	15	20x18°



Installation

The fans will be installed in the building per valid directives, local and OSH regulations, and according to reference documents such as the Operation and Maintenance Manuals.

Advantages

- horizontal and vertical installation
- PTC sensors as a standard
- easy installation of the system due to the appropriate construction of the fan and the connection box mounted on the housing unit
- easy adjustment due to the interoperability with an inverter
- operation at 50 or 60 Hz
- wide range of accessories
- many types of rotors
- high efficiency
- low level of noise

Accessories

- mounting feet
- anti-vibration mounts
- elastic connection pipes
- silencers without core
- silencers with core
- intake nozzles
- protection mesh
- diffusers
- service switches



Technical data, characteristics and selection cards for individual duty points are prepared for individual projects by the Smay Design Department every single time.

Technical data

Detailed technical data generated for individually selected fans are available in the Smay Technical Department.

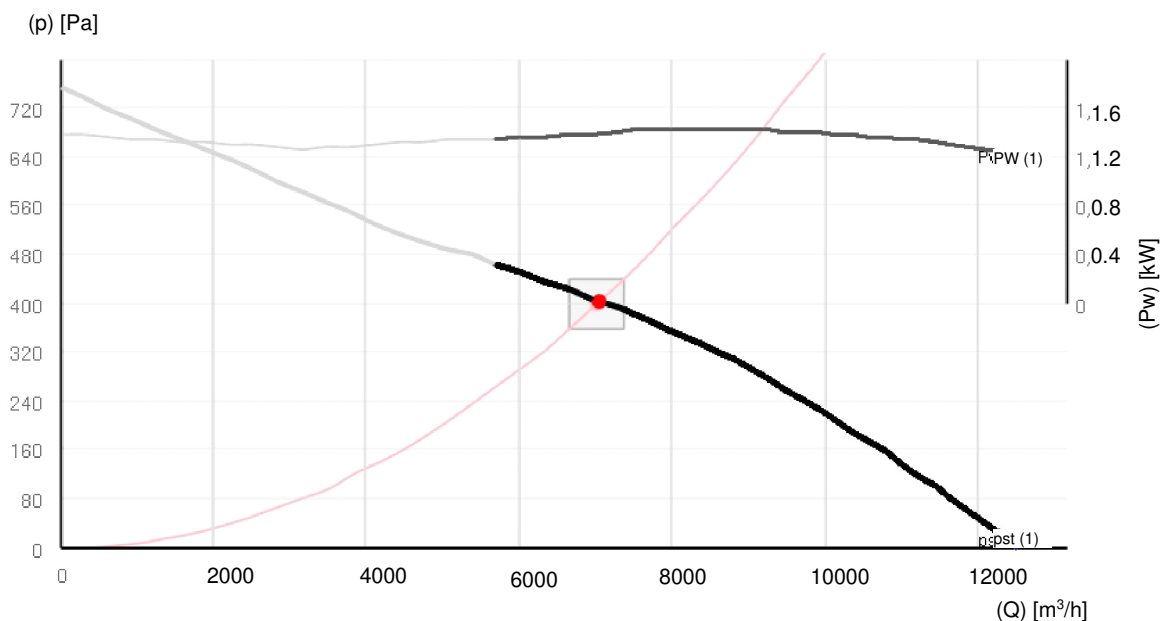


Chart 1. Example characteristics of the SFL/M fan